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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,870	12/31/2003	Shelly D. Farnham	MS1-1914US	6293
22801 LEE & HAYES	7590 04/03/200 SPLLC	EXAMINER		
421 W RIVERSIDE AVENUE SUITE 500			RAYYAN, SUSAN F	
SPOKANE, WA 99201			ART UNIT	PAPER NUMBER
			2167	
			MAIL DATE	DELIVERY MODE
			04/03/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/749,870	FARNHAM ET AL.	
Office Action Summary	Examiner	Art Unit	
	SUSAN FOSTER RAYYAN	2167	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING ID.  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period. Failure to reply within the set or extended period for reply will, by statuly Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be tind the will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on <u>27 F</u> This action is <b>FINAL</b> . 2b) ☑ This action is application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr		
Disposition of Claims			
4)  Claim(s) 1-7,9,10 and 12-30 is/are pending in 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-7,9-10,12-30 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/	awn from consideration.		
Application Papers			
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) ac Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	cepted or b) objected to by the drawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat*  * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat ority documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal I 6)  Other:	ate	

Art Unit: 2167

### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 27, 2008 has been entered.
- 2. Claims 1-7, 9-10, 12-30 are pending.

## Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In claim 15: "computer readable storage memories". In claim 22: "computer readable memories". In claims 23-28: "computer-readable storage media".

Art Unit: 2167

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 16, 18, 22 are rejected under 35 U.S.C. 102(a) as being anticipated by

US Patent Number 6,486,898 issued Jacquelyn Martino ("Martino").

## As per claim 16 Martino anticipates:

displaying a first end point (Figure 5, reference number I7);

displaying components associated with the first end point (Figure 5, reference

number I2);

displaying a second end point (Figure 5, reference number 18);

displaying components associated with the second end point (Figure 5,

reference number 15);

displaying a common component associated with the first end point and the

second end point (Figure 5, reference number I3);

Art Unit: 2167

displaying a link between the common component and the first end point (Figure 5, reference number L27);

and displaying a link between the common component and the second end point (Figure 5, reference number L28).

determining a path strength associated with the common component by, at least in part,:

determining a first link strength for the link between the common component and the first end point, determining a second link strength for the link between the common component and the second end point, and calculating the path strength based at least in part on multiplying the first link strength and the second link strength (see Figure 5, and column 4, lines 17-40, location indicates a relational distance from the reference node, Vertical and horizontal positioning is used to indicate the degrees of separation, nodes of decreasing relationship are placed to the right and down from the reference node).

As per claim 18, same as claim arguments above and Martino anticipates: displaying a second common component associated with the first end point and the second end point (Figure 5, reference number I6); displaying a link between the second common component and the first end point (Figure 5, reference number L26, L12, L27). and displaying a link between the second common component and the second

end point (Figure 5, reference number L56, L58).

Art Unit: 2167

Claim 22 is rejected based on the same arguments as claim 16.

# Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9-10, 12-15, 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 6,832,245 issued to Ellen Isaacs et al ("Isaacs") and by US Patent Number 6,486,898 issued Jacquelyn Martino ("Martino") and of US Publication Number 2005/0086238 issued to Rocky Harry W. Nevin III ("Nevin").

### As per claim 1 Isaacs teaches:

identifying components associated with a first end point in an environment (column 2, lines 41-50, as identify contacts (components)); identifying components associated with a second end point in the environment (column 2, lines 41-50, as identify contacts (components)); determining whether any of the identified components are associated with both the first end point and the second end point (column 1, lines 66-column 2, line 1, as identify priority to one another and column 5, lines 50-60);

Art Unit: 2167

identifying relationships between the first end point, the second end point, and any components associated with both the first end point and the second end point (column 2, lines 60-65, as determine contact id and relationships between).

Isaacs does not explicitly teach displaying relationships by, in part, displaying ... first end point ... and the second end point. Martino does teach displaying relationships by, in part, displaying ... first end point ... and the second end point (See Figure 5: Reference Numbers I7, I2 endpoints) to facilitate a recognition of the relationship among information items. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Isaac with displaying relationships by, in part, displaying ... first end point ... and the second end point to facilitate a recognition of the relationship among information items as described by Martino (column 2, line 65-column 3, line 2).

Isaacs and Martino do not explicitly teach displaying relationships includes displaying a social context associated with the first end point and displaying a social context associated with the second end point and displaying associated information in response to a user's identification of either the first end point or the second end point Nevin does wherein displaying relationships includes displaying a social context associated with the first end point and displaying a social context associated with the second end point and displaying associated information in response to a user's identification of either the first end point or the second end point (Figure 4, paragraph 190, manipulating regions of the background with the mouse. One or more data nodes are directly 'hit', increasing

their magnitude, and secondary nodes (those distal to a primary) and their links are affected: exactly how depends on the spread mode of the operation. Nearness to the point of view is usually a function of link-distance and magnitude, but other methods are possible, e.g. link-distance alone which display data in a simple hierarchical set of 'levels'. Details of nodes are normally suppressed, but with the 'magnifier mode' turned on, any node under the cursor presents more information. Another mode is 'warp mode', which acts like a large magnifying lens on a region of the screen. This is similar to hyperbolic viewing of networks of nodes.). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Isaac further in view of Martino with displaying relationships includes displaying a social context associated with the first end point and displaying a social context associated with the second end to give the user easier access to relevant data and visually present large amounts of data and the relationships between them as described by Nevin (paragraph 172, lines 3-5).

As per claim 2, same as claim arguments above and Isaacs teaches: wherein the environment is a social environment (column 1, lines 57-63, as contacts may be related to social networks such as personal life and workplace).

As per claim 3, same as claim arguments above and Isaacs teaches:

further comprising receiving a request to identify relationships between the first end point and the second end point (column 2, lines 45-49 and column 3, lines 9-11, as provide contact network to the user).

As per claim 4, same as claim arguments above and Martino teaches: wherein determining whether any of the identified components are associated with both the first end point and the second end point includes determining a path strength for each path between the first end point and the second end point (column 4, lines 17-35, as location to indicate a relational distance from a reference node).

As per claim 5, same as claim arguments above and Martino teaches: determining a path strength for each path between the first end point and the second end point and ranking the paths between the first end point and the second end point based on path strength (column 5, lines 7-16 as nodes are ordered left-to-right based on degree of separation).

**As per claim 6**, same as claim arguments above and Nevin teaches: ignoring paths having a path strength below a predetermined threshold (at paragraph 73, as presenting data related to a threshold).

As per claim 7, same as claim arguments above and Martino teaches:

Art Unit: 2167

wherein identifying relationships includes identifying only the top ranked paths between the first end point and the second end point (See Figure 5 and column 5, lines 1-9, user adjusting the scale to accommodate the inclusion of fewer or more information items on the display).

As per claim 9, same as claim arguments above and Isaacs teaches: wherein displaying relationships includes displaying information regarding at least one component (Figure 1, Reference Number 80: Content Display and column 3, lines 5-15 as listing of contacts).

As per claim 10, same as claim arguments above and Isaacs teaches: wherein displaying relationships includes displaying information regarding at least one link between components (Figure 1, Reference Number 80: Content Display and column 3, lines 5-15 as listing of contacts).

As per claim 12, same as claim arguments above and Martino teaches: wherein displaying relationships includes: displaying the first end point and displaying the second end point; and displaying at least one common component associated with the first end point and the second end point (See Figure 5, display endpoints and common components).

As per claim 13, same as claim arguments above and Martino teaches: displaying a common component associated with the first end point and the second end point displaying at least one link between the common component and the first end point and displaying at least one link between the common

Art Unit: 2167

component and the second end point. (See Figure 5, display endpoints, common components, Links).

As per claim 14, same as claim arguments above and Martino teaches: displaying the first end point, displaying the second end point, displaying components associated with the first end point and displaying components associated with the second end point (Figure 5, reference number I7), displaying the second end point (Figure 5, reference number I8) displaying components associated with the first end point (Figure 5, reference number I2) and displaying components associated with the second end point (Figure 5, reference number I5).

Claim 15 is rejected based on the same arguments as claim 1.

As per claim 29, same as claim arguments above and Martino teaches; wherein the path strength is based at least in part on one or more link strengths, wherein individual link strengths are associated with a link between one or both of:

the first end point and an identified component associated with both the first end point and the second end point or the second end point and an identified component associated with both the first end point and the second end point (see Figure 5, and column 4, lines 17-40).

As per claim 30, same as claim arguments above and Isaacs teaches: wherein one or both of identifying components associated with a first end point in

an environment and identifying components associated with a second end point in the environment are performed at last in part by analyzing an organizational chart (column 2, lines 45-59, as grouping of colleges, a company, an organization).

Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 6,486,898 issued Jacquelyn Martino ("Martino") and US Publication Number 2005/0086238 issued to Rocky Harry W. Nevin III ("Nevin").

#### As per claim 23, Martino teaches:

display a first end point in a social network (Figure 5, reference number I7); display a second end point in a social network (Figure 5, reference number I8); identify a common component associated with the first end point and the second end point (Figure 5, reference number I3);

display the common component associated with the first end point (Figure 5, reference number I2) and the second end point (Figure 5, reference number L27);

display a link between the common component and the first end point (Figure 5, reference number L27);

and display a link between the common component and the second end point (Figure 5, reference number L28).

Martino does not explicitly teach displaying ... a social context associated with the ... end point and displaying associated information in response to a user's identification of either the first end point or the second end point Nevin

does teach displaying ... a social context associated with the ... end point and displaying associated information in response to a user's identification of either the first end point or the second end point (Figure 4, paragraph 190, manipulating regions of the background with the mouse. One or more data nodes are directly 'hit', increasing their magnitude, and secondary nodes (those distal to a primary) and their links are affected: exactly how depends on the spread mode of the operation. Nearness to the point of view is usually a function of linkdistance and magnitude, but other methods are possible, e.g. link-distance alone which display data in a simple hierarchical set of 'levels'. Details of nodes are normally suppressed, but with the 'magnifier mode' turned on, any node under the cursor presents more information. Another mode is 'warp mode', which acts like a large magnifying lens on a region of the screen. This is similar to hyperbolic viewing of networks of nodes.). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Isaac further in view of Martino with displaying ... a social context associated with the ... end point to give the user easier access to relevant data and visually present large amounts of data and the relationships between them as described by Nevin (paragraph 172, lines 3-5

As per claim 24, same as claim arguments above and Nevin teaches:

wherein the one or more processors further determine a path strength associated

with the common component and prevent display of the common component if

the path strength is below a threshold (at paragraph 73, as presenting data related to a threshold).

As per claim 25, same as claim arguments above and Nevin teaches: wherein the one or more processors further display a second link between the common component and the first end point (at paragraph 199 and Figure 1, as nodes linked together more than once).

As per claim 26, same as claim arguments above and Nevin teaches: wherein the one or more processors further display a second link between the common component and the first end point and display a second link between the common component and the second end point (at paragraph 199 and Figure 1, as nodes linked together more than once).

As per claim 27, same as claim arguments above and Martino teaches: wherein the one or more processors further identify a second common component associated with the first end point and the second end point(Figure 5, reference number I6).

As per claim 28, same as claim arguments above and Martino teaches:

wherein the one or more processors further display the second common component associated with the first end point and the second end point(Figure 5, reference number I6).

Claims 17,19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martino et al as applied to claims 16,23 above, and further in view of US Publication Number 2005/0086238 issued to Rocky Harry W. Nevin III ("Nevin").

As per claim 17, same as claim arguments above and Martino does not explicitly teach teaches determining a path strength associated with the common component and

and preventing the display of the common component if the path strength is below a threshold. Nevin does teach this limitation (at paragraph 73, as presenting data related to a threshold) to give the user easier access to relevant data and visually present large amounts of data and the relationships between them. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martino with determining a path strength associated with the common component and preventing the display of the common component if the path strength is below a threshold to give the user easier access to relevant data and visually present large amounts of data and the relationships between them as described by Nevin (paragraph 172, lines 3-5).

As per claim 19, same as claim arguments above and Martino does not explicitly teach displaying a second link between the common component and the first end point. Nevin does teach this limitation (at paragraph 199 and Figure 1, as nodes linked together more than once) to give the user easier access to relevant data and visually present large amounts of data and the relationships between them. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martino with displaying a second link between the common component and the first end point to give the user easier access to relevant data and visually present large amounts of data and the relationships between them as described by Nevin (paragraph 172, lines 3-5).

As per claim 20, same as claim arguments above and Martino teaches: determining a strongest link between the common component and the first end point and highlighting the strongest link between the common component and the first end point (column 6, lines 60-61, highlighting).

As per claim 21, same as claim arguments above and Martino does not explicitly teach

displaying a second link between the common component and the first endpoint and displaying a second link between the common component and the second end point. Nevin does teach this limitation (at paragraph 199 and Figure 1, as nodes linked together more than once) to give the user easier access to relevant data and visually present large amounts of data and the relationships between them. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Martino with displaying a second link between the common component and the first endpoint and displaying a second link between the common component and the second end point to give the user easier access to relevant data and visually present large amounts of data and the relationships between them as described by Nevin (paragraph 172, lines 3-5).

# Response to Arguments

5. Applicant's arguments filed February 27, 2008 have been fully considered but they are not persuasive.

Applicant argues prior art of record does not teach calculating the path strength based at least in part on multiplying the first link strength and the second link strength. Martino does teach this at (see Figure 5, and column 4, lines 17-40, location indicates a relational distance from the reference node, Vertical and horizontal positioning is used to indicate the degrees of separation, nodes of decreasing relationship are placed to the right and down from the reference node). Martino teaches calculating the path strength based at least in part on the first link strength and the second link strength .Although Martino does not explicitly teach multiplying Martino is capable of producing the same results as the claim language.

Applicant argues prior art of record does not teach "displaying a social context associated with the first end point and displaying a social context associated with the second end point" and "displaying associated information in response to a user's identification of either the first end point or the second end point". Nevin does wherein displaying relationships includes displaying a social context associated with the first end point and displaying a social context associated with the second end point and displaying associated information in response to a user's identification of either the first end point or the second end point (Figure 4, paragraph 190, manipulating regions of the background with the mouse. One or more data nodes are directly 'hit', increasing their magnitude, and secondary nodes (those distal to a primary) and their links are affected: exactly how depends on the spread mode of the operation. Nearness to the point of view is usually a function of link-distance and magnitude, but other methods are possible, e.g. link-distance alone which display data in a simple hierarchical set of 'levels'. Details of nodes are normally suppressed, but with the 'magnifier mode` turned on, any node under the cursor presents more information. Another mode is 'warp mode', which acts like a large magnifying lens on a region of the screen. This is similar to hyperbolic viewing of networks of nodes.).

Applicant argues prior art of record does not teach "identifying only the top ranked paths between the end point and the second end point". Martino does teach this at Figure 5 and column 5, lines 1-9, user adjusting the scale to accommodate the inclusion of fewer or more information items on the display.

#### **Contact Information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan F. Rayyan whose telephone number is 571-272-1675. The examiner can normally be reached on M-F, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John R. Cottingham/ Supervisory Patent Examiner, Art Unit 2167

Art Unit: 2167

March 28, 2008